

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims:

1. (Currently Amended) A method of providing bandwidth on demand in a broadband communications system, comprising:
 - establishing a default connection between a subscriber data processing system connected to a client-premises equipment (CPE) and a content-provider data processing system, said default connection comprising an asynchronous transfer mode (ATM) permanent virtual circuit (PVC);
 - initiating a bandwidth-on-demand session via a subscriber, said bandwidth-on-demand session creates one or more switched virtual circuits (SVCs) between said subscriber data processing system and said content-provider data processing system to supplement the bandwidth of said default connection; and
 - ending said bandwidth-on-demand session by terminating said one or more SVCs, wherein said step of initiating a bandwidth-on-demand session comprises sending a message from said subscriber data processing system to a proxy signaling server comprising information related to said bandwidth-on-demand session and, in response to said message, sending a message from said proxy signaling server to an ATM edge device to create one or more SVCs between said subscriber data processing system and said content-provider data processing system, wherein said message from said subscriber data processing system to said proxy signaling server does not comprise User Network Interface (UNI) signals and wherein said message from said proxy signaling server to said ATM edge device comprises UNI signals.
2. (Canceled)
3. (Previously Presented) The method of claim 1 wherein said information comprises data for authenticating said subscriber.

4. (Canceled)

5. (Previously Presented) The method of claim 1 wherein said step of ending said bandwidth-on-demand session comprises sending a message from said subscriber data processing system to a proxy signaling server comprising an instruction to end said bandwidth-on-demand session and, in response to said message, sending a message from said proxy signaling server to an ATM edge device to terminate said one or more SVCs between said subscriber data processing system and said content-provider data processing system.

6. (Previously Presented) The method of claim 1 wherein said ATM edge device comprises an ATM switch.

7. (Previously Presented) The method of claim 6 wherein said step of initiating a bandwidth-on-demand session comprises said subscriber using a client-side application on said subscriber data processing system to request said bandwidth-on-demand session.

8. (Canceled)

9. (Canceled)

10. (Currently Amended) A broadband communication system for providing bandwidth-on-demand, comprising:

a subscriber data processing system for providing a subscriber with access to said communication system;

a digital subscriber line (DSL) modem client premises equipment (CPE) in communication with the subscriber data processing system for modulating and

demodulating data for transmission over a local loop telephone line to a digital subscriber line (DSL) multiplexer (DSLAM);

an asynchronous transfer mode (ATM) edge device in communication with said DSLAM for receiving data from and transmitting data over an ATM network;

a proxy signaling server in communication with said subscriber data processing system;

a content-provider data processing system in communication with said ATM network for providing broadband content to a subscriber;

a client-side application on said subscriber data processing system for use by said subscriber:

to login to said proxy signaling server,

to receive service advertising information from said proxy signaling server due to said login,

to request a bandwidth-on-demand session after said receive, and

to transmit information to said proxy signaling server in response to said request; and

a connection-management application on said proxy signaling server for:

providing service advertising information to said client-side application due to said login,

receiving said information from the client-side application, and

signaling to said ATM edge device on behalf of said client-premises equipment (CPE) to establish one or more switched virtual circuits (SVCs) from said CPE to said content-provider data processing system.

11. (Currently Amended) The system of claim 10 wherein said ~~digital subscriber line (DSL) modem~~ is CPE supports a bridge mode.

12. (Original) The system of claim 11 wherein said proxy signaling server uses User Network Interface (UNI) signaling to signal said ATM switch on behalf of said CPE.

13. (Original) The system of claim 12 wherein said client-side application comprises a web browser plug-in.

14. (Original) The system of claim 12 wherein said client-side application comprises a dialer application.

15. (Original) The system of claim 12 wherein said ATM edge device comprises an ATM switch.

16. (Currently Amended) A communications system, comprising:
a subscriber data processing system for use by a subscriber to transmit and receive data to and from a remote content-provider data processing system;

client premise equipment (CPE) in communication with said subscriber data processing system for transmitting and receiving said data over a local loop to a DSL multiplexer (DSLAM);

an asynchronous transfer mode (ATM) edge device in communication with said DSLAM for transmitting and receiving ~~information~~ said data over an ATM network;

a proxy signaling server in communication with said subscriber data processing system and said ATM edge device;

means in said subscriber data processing system, responsive to said subscriber, to send a request to said proxy signaling ~~server~~ server to login to said proxy signaling server, to receive service advertising ~~information~~ data from said proxy signaling server due to said login, to initiate a bandwidth-on-demand session after said receive, to terminate said bandwidth-on-demand session, and to logoff from said proxy signaling server after said termination; and

means in said proxy signaling server, responsive to said requests, wherein said initiating said bandwidth-on-demand session initiated by said means in said subscriber data system creates one or more Switched Virtual Circuits (SVCs) between said subscriber data processing system and said content-provider data processing system.

17. (Previously Presented) The method of claim 1, further comprising:
logging onto to a proxy signaling server via a subscriber of said subscriber data processing system; and
providing service advertising information to said subscriber from the proxy signaling server in response to a successful login,
wherein initiating said bandwidth-on-demand session is after said providing of said service advertising information.

18. (Previously Presented) The method of claim 17, further comprising updating a route table of said subscriber data processing system via the proxy signaling server in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVCs.

19. (Previously Presented) The method of claim 1, wherein said ending of said bandwidth-on-demand session is by said subscriber.

20. (Previously Presented) The system of claim 10, wherein said login includes a message comprising a password and customer identifier.

21. (Previously Presented) The system of claim 10, wherein a termination of said created one or more SVCs is initiated via said client-side application.

Applicant(s) : Shaobo Wang
Serial No. : 10/672,771
Filed : September 26, 2003
Page : 7 of 9

Attorney Docket No.: 3A001-002001
Client Ref. No.: GD43911/SAM

22. (Previously Presented) The system of claim 21, wherein a logoff from said proxy signaling server via said client-side application occurs after said termination of one or more SVCs.